

What Is Claimed Is:

1 1. A method of uploading data for operating at least one media device over a
2 network, comprising:
3 receiving a request for data from at least one first server;
4 responsive to the request received, querying a data source to extract the
5 data for operating the media device;
6 periodically sending the data extracted to the first server, the first server
7 being communicatively coupled to the network; and
8 periodically transmitting the data from the first server to the media device
9 over the network.

1 2. The method according to Claim 1, wherein the request is received by a second
2 server, the second server periodically pushing the data extracted to the first server
3 according to a batch mode.

1 3. The method according to Claim 1, wherein the data comprises registration
2 information associated with the media device.

1 4. The method according to Claim 1, wherein the data comprises pending
2 transaction information associated with the media device.

1 5. The method according to Claim 1, wherein the data is transferred in XML
2 format.

1 6. The method according to Claim 1, wherein the data source comprises
2 databases and online services.

1 7. The method according to Claim 1, wherein the data comprises broadcast
2 programming guides in an electronic format.

1 8. The method according to Claim 1, wherein the network comprises the Internet.

1 9. The method according to Claim 1, wherein the media device comprises a
2 digital video recorder.

1 10. The method according to Claim 1, wherein the first server comprises a
2 Domain Naming Service (DNS) server.

1 11. The method according to Claim 1, further comprising a plurality of first
2 servers for balancing load associated with a plurality of media devices.

1 12. A method of enabling a virtual representation corresponding to at least one
2 media device over a network, comprising:

3 monitoring data disposed on a first server until ready for transfer to a

4 second server, the data being associated with the media device

5 coupled to the first server over the network;
6 responsive to the data being ready for transfer, requesting transfer of the
7 data from the first server;
8 receiving the data transferred from the first server; and
9 storing the data received in a data source, the data being extracted from the
10 data source to create the virtual representation.

1 13. The method according to Claim 12, wherein the data is formatted in XML.

1 14. The method according to Claim 14, wherein the virtual representation is
2 formed by combining the data with additional data stored in the data source.

1 15. The method according to Claim 12, wherein the data source comprises at
2 least one database.

1 16. The method according to Claim 12, wherein the second server requests
2 transfer of the data from the first server with using an http request.

1 17. The method according to Claim 12, wherein the media device is selected
2 from a group consisting of a digital video recorder, a personal digital assistant, a mobile
3 telephone, and a pager.

1 18. The method according to Claim 12, wherein the virtual representation is
2 selected from a group of interfaces consisting of a login interface, a Channel Guide, a

3 Replay Guide, Replay Shows, Replay Channels, Find Shows, and Manual Record.

1 19. The method according to Claim 12, wherein the data is transferred
2 periodically.

1 20. A method of remote control over a network of at least one media device,
2 comprising:
3 receiving commands from a first server to operate the media device;
4 responsive to the commands received, executing the commands to control
5 the media device;
6 producing one or more results in response to executing the commands; and
7 transmitting the results to the first server over the network.

1 21. The method according to Claim 20, wherein the first server comprises a
2 Domain Naming Service (DNS) server.

1 22. The method according to Claim 21, wherein the network comprises the
2 Internet.

1 23. The method according to Claim 20, wherein the results are transferred in
2 XML format.

1 24. The method according to Claim 20, wherein the media device comprises a
2 digital video recorder.

1 25. A system, comprising:

2 a first subsystem having at least one server coupled to a network, the
3 network being in communication with one or more media devices,
4 the server enabling the media devices to be distributed with a load-
5 balanced configuration;

6 coupled to the first subsystem, a second subsystem maintaining a virtual
7 representation of one or more user interfaces replicated from each
8 of the media devices; and
9 coupled to the second subsystem, a third subsystem displaying the virtual
10 representation and simulating operation of the media devices based
11 on portions of the user interfaces being selected.

1 26. The system according to Claim 25, wherein the media devices comprise
2 digital video recorders.

1 27. The system according to Claim 25, wherein the network comprises the
2 Internet.

1 28. The system according to claim 27, wherein the server comprises a Domain
2 Naming Services (DNS) server.

1 29. A computer program product for uploading data for operating at least one
2 media device over a network, the computer program product stored on a computer

3 readable medium, and adapted to perform operations, comprising:
4 receiving a request for data from at least one first server;
5 responsive to the request received, querying a data source to extract the
6 data for operating the media device;
7 periodically sending the data extracted to the first server, the first server
8 being communicatively coupled to the network; and
9 periodically transmitting the data from the first server to the media device
10 over the network.

1 30. A computer program product for enabling a virtual representation
2 corresponding to at least one media device over a network, the computer program product
3 stored on a computer readable medium, and adapted to perform operations, comprising:
4 monitoring data disposed on a first server until ready for transfer to a
5 second server, the data being associated with the media device
6 coupled to the first server over the network;
7 responsive to the data being ready for transfer, requesting transfer of the
8 data from the first server;
9 receiving the data transferred from the first server; and
10 storing the data received in a data source, the data being extracted from the
11 data source to create the virtual representation.

1 31. A computer program product for remote control over a network of at least
2 one media device, the computer program product stored on a computer readable medium,
3 and adapted to perform operations, comprising:

4 receiving commands from a first server to operate the media device;
5 responsive to the commands received, executing the commands to control
6 the media device;
7 producing one or more results in response to executing the commands; and
8 transmitting the results to the first server over the network.

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